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EXAMINER

CARTER, TIA A

ART UNIT

PAPER NUMBER

2626

DATE MAILED: 01/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/897,769

Applicant(s)

GRUZDEV ET AL

Examiner

Tia A Carter

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/04/02</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Inoue (US. 6097836).

Regarding claim 1, Inoue discloses a method of providing a tone reproduction curve relating to a first image, tone reproduction curve defined by at least three points selected from the group consisting of an original minimum color value, an original maximum color value, and user specified control point (USCP) that represents a change in color value from an original color value in an image to a desired color value 9fig. 3, col. 8, lines 60-67and col. 9,lines 1-18), the method comprising:

Art Unit: 2626

Defining at least one threshold color value, the threshold color value defining a threshold color value in relationship to the original minimum color value or the original maximum color value, the threshold color value defining a threshold where if the USCP lies either between an original minimum color value and its associated threshold or between an original maximum color value and its second associated threshold, the original minimum or maximum color value associated with that threshold is conceptually moved farther from the position of the threshold with which that original color value is associated to form a conceptual minimum color value or conceptual maximum color value (fig. 4, col. 11, lines 66-67 and col. 12, lines 1-57), and

Then creating a monotonic tone reproduction curve through a) the conceptual minimum color value or conceptual maximum color value (fig. 2, col. 10, lines 58-67), b) the USCP (specifying unit 50), and the original minimum color value or original maximum color value that was not associated with the threshold (fig. 4, col. 10, lines 35-40).

Regarding claim 2, Inoue discloses the method of claim 1 wherein the monotonic tone reproduction curve restricts color values that may be selected for imaging from the curve to color values between the original maximum color value and the original minimum color value (fig. 4, col. 11, lines 66-67 and col. 12, lines 1-5 and lines 44-57).

Art Unit: 2626

Regarding claim 3, Inoue discloses the method of claim 2 wherein the monotonic tone reproduction curve is created by selecting a first color to be corrected, selecting a second color to replace the first color, and using the first and second color to define the USCP (fig. 2, col. 10, lines 58-67 and col. 11, lines 1-30).

Regarding claim 4, Inoue discloses the method of claim 1 wherein the tone reproduction curve comprises a spline curve (fig. 4, col. 12, lines 18-20).

Regarding claim 5, Inoue discloses the method of claim 1 wherein the tone reproduction curve comprises a cubic spline curve (fig. 4, col. 12, lines 18-20).

Regarding claim 6, Inoue discloses the method of claim 3 wherein the second color is chosen by an operator selecting a color from within the first image (figs. 4-5, col. 10, lines 35-42).

Regarding claim 7, Inoue discloses the method of claim 3 wherein the second color is chosen by an operator selecting a color from a second image (figs. 4-5, col. 10, lines 35-42).

Regarding claim 8, Inoue discloses the method of claim 3 wherein the second color is chosen by an operator selecting a color from a stored collection of colors (fig. 8, col. 16, lines 49-59).

Art Unit: 2626

Regarding claim 9, Inoue discloses the method of claim 3 wherein the second color is selected by an operator selecting a color from memory colors (fig. 8, col. 16, lines 49-59).

Regarding claim 10, Inoue discloses the method of claim 6, wherein the stored collection of colors (buffer 10) is stored a generic named files having specifies sub-files of named colors listed in the generic name files (fig. 1, col. 9, lines 65-67-image buffer disclosed can store any specified files).

Regarding claim 11, Inoue disclose the method of claim 7 wherein the generic named files at least one generic named file selected from the group consisting of vegetation, grass, grasses, foliage, skin tones, flesh tones, tree, sky, wood, eyes, hair, fruits, vegetable, water, sun, dawn, dusk, sunrise, sunset, foods, beverages, eye colors, metals, stained glass colors, primary colors, achromatic colors, and animals (fig. 1, col. 9, lines 65-67-image buffer disclosed can store any specified files).

Regarding claim 12, Inoue discloses the method of claim 1 wherein the monotonic tone reproduction curve restricts color values that may be selected for imaging from the curve to color values available from an associated image reproduction system (fig. 4, col. 11, lines 66-67 and col. 12, lines 1-5 and lines 44-57).

Regarding claim 13, Inoue discloses a color correction system for correcting colors in a color image comprising:

Coordinates for registering points in a first color space of at least one standard point, the first color space having axes for specifying colors (fig. 5, col. 9, lines 25-29).

A second set of coordinates for registering points in a second color space of at least one standard point, the second color space having axes that include at least one coordinate for specifying color hues (fig. 5, col. 9, lines 30-34);

A translator (conversion unit 80) to convert image data from at least one point in the first color space to coordinates in the second color space (fig. 4, col. 13, lines 10-16);

A modifier (specifying unit 50) for modifying at least hue within image data in the second color space to form corrected image data in the second color space (fig. 4, col. 10, lines 58-67);

A translator (61) for transferring corrected image data in the second color space to corrected image data in the first color space (fig. 5, col. 11, lines 9-20).

Regarding claim 14, Inoue discloses the color device of claim 13 wherein all points are provided within tone reproduction curve (fig. 4, col. 9, lines 34-41).

Regarding claim 15, Inoue discloses the color device of claim 10 wherein the modifier (50) corrects hue and at least one other color component selected from

Art Unit: 2626

lightness, chroma and saturation in the second color space (fig. 10, col. 13, lines 47-54).

Regarding claim 16, Inoue disclose the color device of claim 11 wherein the modifier corrects hue and at least two other color components selected from the group consisting of chroma, lightness and saturation in the second color space (fig. 10, col. 1, lines 47-54).

Regarding claim 17, Inoue discloses the color device of claim 10 wherein the first color space comprises a three-color color space (fig. 2, col. 10, lines 58-67).

Regarding claim 18, Inoue discloses the color device of claim 11 wherein the first color space comprises a three- color color space of red, green, and blue (fig. 2, col. 10, lines 58-67).

Regarding claim 19, Inoue discloses a method for correcting colors in a color image comprising:

Providing image data of points in a first color space, the first color space having axes for specifying colors (fig. 5, col. 9, lines 24-34).

Converting (conversion unit 80) image data points in the first color space into image data points in a second color space, the second color space having coordinates that include at least one coordinate for hue for specifying colors (fig. 4, col. 13, lines 10-16);

Art Unit: 2626

Modifying (specifying unit 50) at least hue of at least some data points within image data in the second color space to form corrected image data in the second color space (fig. 4, col. 10, lines 58-67);

Transferring (61) corrected image data in the second color space to the first color space as corrected data (fig. 5, col. 11, lines 9-20).

Regarding claim 20, Inoue discloses the method of claim 15 wherein the first color space defines colors in color channels (fig. 2, col. 10, lines 58-67).

Regarding claim 21, Inoue discloses the method of claim 15 wherein the first color space defines colors in color channels of red, green and blue (fig. 2, col. 10, lines 58-67).

Regarding claim 22, Inoue discloses the method of claim 15 wherein modifying at least hue comprises modifying hue and at least one other color space component selected from the group consisting of lightness and saturation (fig. 10, col. 13, lines 47-54).

Regarding claim 23, Inoue discloses the method of claim 15 wherein modifying at least hue comprises modifying hue and both lightness and saturation (fig. 10, col. 13, lines 47-54).

Art Unit: 2626

Regarding claim 24, Inoue disclose the method of claim 15 wherein modifying is effected by a procedure selected from the group consisting of selecting specific image color data replace converted image data in the second color space, selecting a palette from which to select a specific color to replace converted image data in the second color space, and selecting colors from a look-up table (fig. 4, col. 13, lines 10-34).

Regarding claim 25, Inoue discloses the process of claim 15 wherein image data points in the first color space are selected for correction by application of a pointer to representation of the image (fig. 4, col. 12, lines 6-26).

Regarding claim 26, Inoue discloses the process of claim 15 wherein upon modifying image data in the second color space, and where there is no direction given in the modification to alter saturation, a predetermined amount of change in saturation is provided into image data in the second color space to cause a slight visual change of the image (fig. 4, col. 12, lines 6-26).

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Murashita (US. 2003/0142110) and Maltz (US. 2002/0140956) are cited to show related art with respect to image reproduction systems.


Art Unit: 2626

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tia A Carter whose telephone number is 703 - 306-5433. The examiner can normally be reached on M-F (7:00-3:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A Williams can be reached on 703-305-4863. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


TAC
12/10/04


KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER

Tia A Carter
Examiner
Art Unit 2626